

ABSTRACT

The present invention provides methods and apparatus for monitoring processor tasks and associated processor loads that are allocated to be performed by respective sub-processing units associated with a main processing unit. In one example, re-allocating at least some of the tasks is based on their associated processor loads such that at least one of the sub-processing units is not scheduled to perform any tasks. The sub-processing units that are not scheduled to perform any tasks may be commanded into a low power consumption state. Each sub-processing unit may include one or both of a power supply interrupt circuit and a clock interrupt circuit. Either circuit may be employed to place the sub-processing units into the low power consumption state.